

Giant water bug photographed devouring baby turtle

By Ella Davies Reporter, BBC Nature



Role reversal: insects prey upon reptiles

(img 1)

A giant water bug has been photographed eating a juvenile turtle in an unusual predatory role reversal. Large bugs in the Lethocerinae family have been known to prey upon small vertebrates including fish and frogs. But unlike insects that often fall prey to reptiles, scientists have observed one particular species of bug eating snakes and a turtle. Dr. Shin-ya Ohba recorded the unusual behavior during night sampling in western Hyogo, central Japan. Writing in the journal *Entomological Science*, Dr Ohba describes observing a *Kirkaldyia deyrolli* eating a Reeve's pond turtle in a ditch next to a rice field.

Names of the beasts

(img 2)



(img 3)



These bugs are also known as "giant fish killers" for their carnivorous tastes

Their attraction to artificial lights at night has also earned them the title "electric-light bugs." Americans also refer to them as "toe-biters" because they have been known to bite unsuspecting swimmers. Using its front legs the giant water bug gripped the turtle, inserting its syringe-like rostrum into the prey's neck in order to feed. The giant water bugs are known to only attack moving prey, so it is likely that the 58mm insect captured and killed the young turtle before feeding on it. Dr. Ohba has also photographed giant water bugs eating snakes in the past. "Everyone thinks that Lethocerinae bugs live on fishes and frogs. Although eating a turtle and snake are rare in the natural condition, [this evidence] surprises naturalists [by showing] voracious feeding habits," said Dr. Ohba. He suggests that these observations of bugs predating reptiles call into question previously held opinions about predator-prey dynamics in freshwater habitats. *K. deyrolli* are native to Japan where they have been found living in rice fields, feeding primarily on small fish and frogs. The species is listed as endangered by the Japanese Environment Agency following serious declines over the last forty years, reportedly due to habitat loss and water pollution.



A giant water bug successfully takes on a snake

(img 4)

Giant water bugs are the largest of the true bugs (*Hemiptera*) and members of the sub-family *Lethocerinae*. They are found in freshwater ponds, lakes and slow-moving streams and rivers across North America, South America and East Asia. *Lethocerus* species can grow up to 15cm long, are nocturnal and can fly, relying on the light of the full moon to migrate. They possess a venomous bite, which they use to subdue prey and are occasionally known to bite humans, resulting in a burning pain that can last several hours.